STATE OF ALASKA

FRANK H. MURKOWSKI, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION – DESIGN & CONSTRUCTION
Aviation Design Section

4111 AVIATION AVE.
ANCHORAGE, AK 99502 OR
P.O. BOX 196900
ANCHORAGE, AK 99519-6900
(907) 269-0590 FAX (907) 269-0620

May 24, 2004

RE: Levelock Airport
Airport Layout Plan

Gabriel Mahns, Planner
Planning and Programming Branch
Airports Division, Alaska Region
Federal Aviation Administration
222 W. 7th Avenue, #14
Anchorage, Alaska 99513-7587

Dear Mr. Mahns:

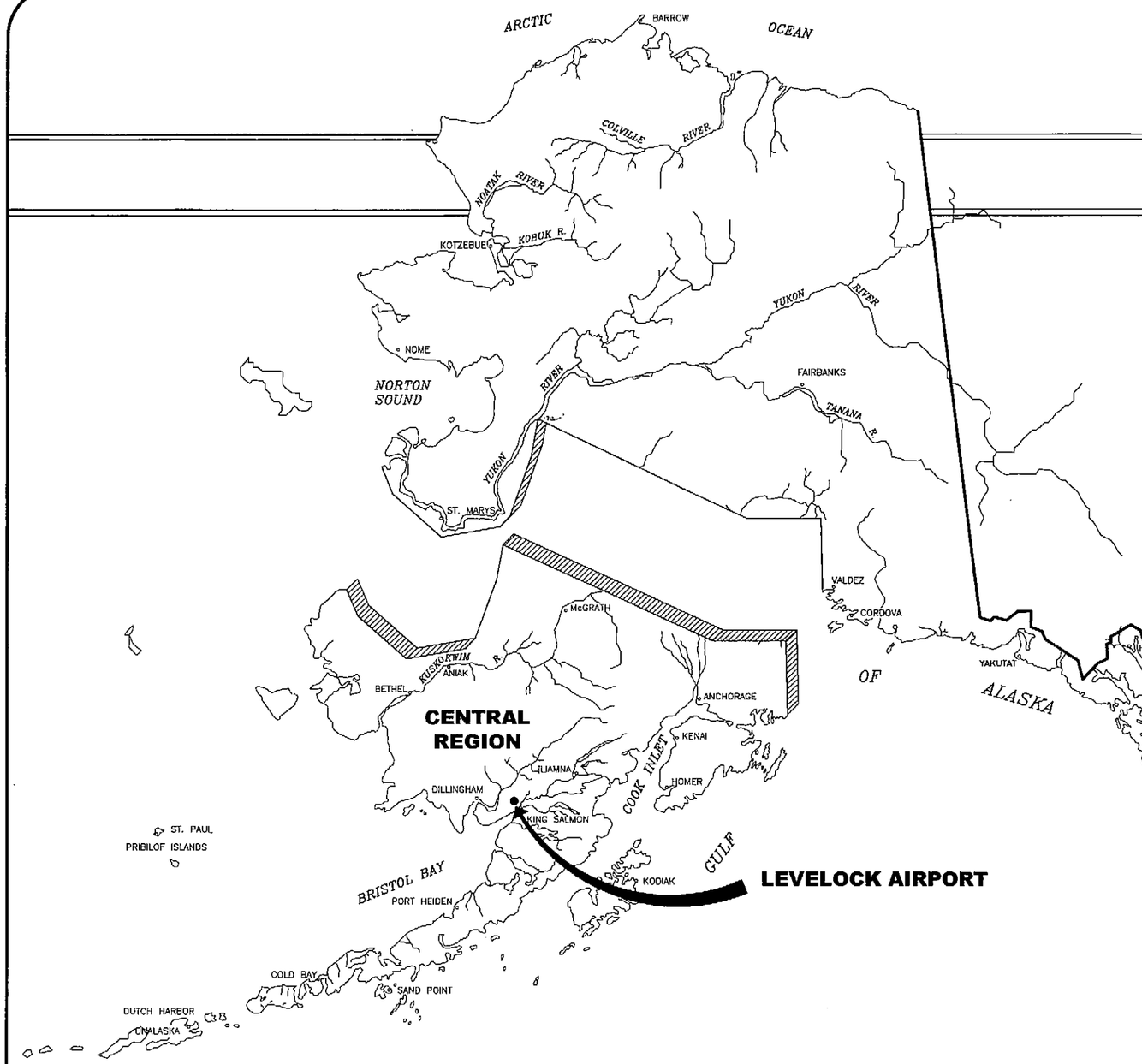
Enclosed are two mylar sets of the as-built Levelock Airport Layout Plan (ALP) for your approval. Please sign both copies and return one copy to us for our files.

If you have any questions, please contact the Project Manager, Gary Lincoln at 269-0606.

Sincerely,

Stephen M. Ryan, P.E.
Design Section Chief
Aviation Design

Enclosures: as stated



AIRPORT LAYOUT PLAN FOR

LEVELOCK AIRPORT

2004

DRAWING INDEX

NOTE:

THESE PLANS HAVE BEEN PREPARED USING THE METRIC S.I. SYSTEM.

SPONSORED BY
STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

CONCUR Gordon C. Keith **DATE** 5/21/04
GORDON C. KEITH, P.E. — CONSTRUCTION & OPERATIONS DIRECTOR

APPROVED **DATE** 5.21.04
ROBERT A. CAMPBELL, P.E. — REGIONAL PRECONSTRUCTION ENGINEER

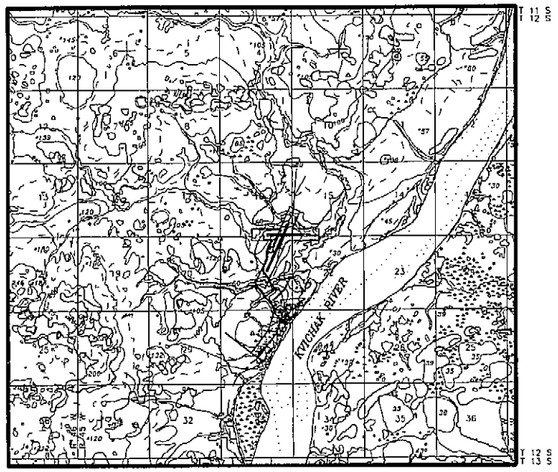
AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
By:
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600
DATE: 7/1/04

FAA AIRSPACE REVIEW NUMBER
99-AAL-088-NRA

LEVELOCK AIRPORT
AIRPORT LAYOUT PLAN

SHEET 1 OF 7

File:w:\projects\levelock\alp\2003\cover Date of Last Revision: 05/06/04 1=1 daveb

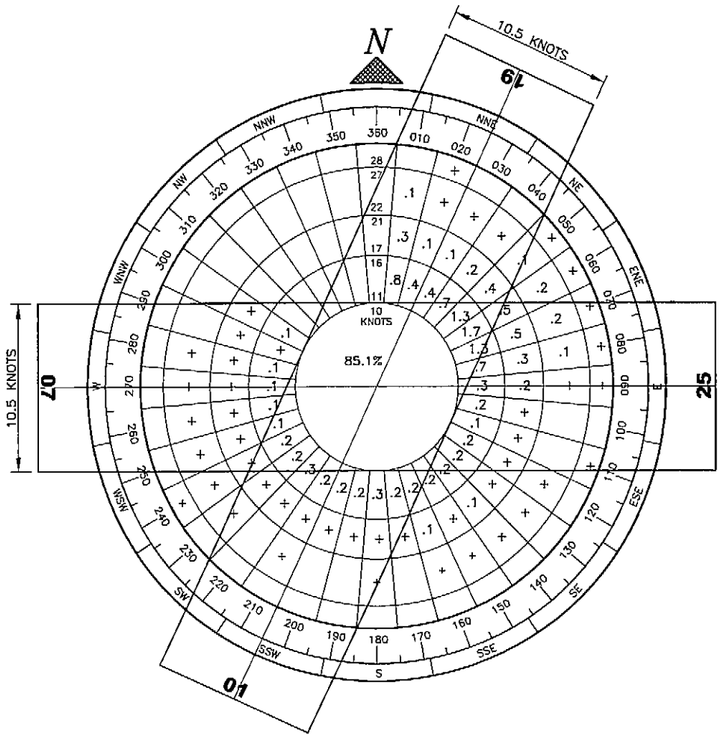


VICINITY MAP

1:63 360 [1"=1 MILE]
T 12 S, R 45 W, SEC. 15, 16, 21, & 22
SEWARD MERIDIAN
U.S.G.S. DILLINGHAM (A-3), ALASKA

CONVERSION FACTORS FROM SI UNITS

TO CONVERT FROM	TO	MULTIPLY BY
STATION (1000 METERS)	FEET	3280.84
KILOMETER (km)	MILE	0.6214
METER (m)	MILE	0.00062137
METER (m)	FOOT	3.28084
MILLIMETER (mm)	FOOT	0.00328084
MILLIMETER (mm)	INCH	0.03937008
SQUARE METER (m^2)	SQUARE FOOT	10.76391042
SQUARE METER (m^2)	SQUARE YARD	1.19599
SQUARE METER (m^2)	ACRE	0.00024711
CUBIC METER (m^3)	CUBIC FOOT	35.3146667
CUBIC METER (m^3)	CUBIC YARD	1.3079506
CUBIC METER (m^3)	GALLON (US LIQUID)	264.17204
CUBIC METER (m^3)	M. GAL.	0.26417204
KILOGRAM (kg)	POUND-MASS (LBM)	2.2046225
KILOGRAM (kg)	TON (SHORT)	0.00110231
NEWTON (n)	POUND-FORCE (LBF)	0.2248089
LUX (lx)	FOOTCANDLE	0.092903
DEGREE CELSIUS (°C)	DEGREE FAHRENHEIT (°F)	TF=(1.8 x TC)+32



WIND DATA

WIND COVERAGE				
	10.5 KTS	13 KTS	16 KTS	20 KTS
RUNWAY 01/19	95.4%	97.5%	99.0%	99.7%
RUNWAY 07/25	94.4%	97.0%	98.9%	99.7%
COMBINED	99.1%	99.7%	99.9%	100%

SOURCE: E.N.R.I., UNIVERSITY OF ALASKA.

PERIOD: AUG. 5, 1995 TO APRIL 15, 1997

NON-STANDARD CONDITIONS

ITEM	STANDARD	EXISTING	FUTURE
RUNWAY 01/19 C/L TO EDGE OF AIRCRAFT PARKING.	60 m	75 m	
RUNWAY 01/19 C/L TO PARALLEL TAXIWAY C/L	67.5 m		100 m
TAXIWAY SAFETY AREA WIDTH	15 m	24 m	24 m
TAXIWAY WIDTH	7.5 m	12 m	12 m

BASIC DATA TABLE

RUNWAY DATA

ITEM	RUNWAY 01/19 EXISTING	RUNWAY 01/19 FUTURE	RUNWAY 07/25	RUNWAY 07/25 FUTURE
EFFECTIVE GRADE	0%			0%
% WIND COVERAGE	95.4 %			99.1 %
INSTRUMENT RUNWAY	01			NONE
RUNWAY SURFACE	GRAVEL			GRAVEL
PAVEMENT STRENGTH (LBS.)	N/A			N/A
APPROACH SURFACES	34:1			20:1
VISIBILITY MINIMUM	1600m [1 MILE]			1600m [1 MILE]
RUNWAY LIGHTING	M.I.			M.I.
RUNWAY MARKING	NONE			NONE
NAVIGATION AIDS	PAPI (01)			NONE
RUNWAY SAFETY AREA DIMENSION	36m x 1144m [118'x3755']			36m x 814m [118'x2671']
RUNWAY DIMENSION	18m x 1000m [59'x3281']			18m x 670m [59'x2198']
RUNWAY OBJECT FREE AREA DIMENSION	120m x 1144m [394'x3753']			75m x 814m [246'x2671']
RUNWAY OBSTACLE FREE ZONE DIMENSION	120m x 1120m [394'x3675']			75m x 790m [246'x2592']
GEODETIC POSITIONS (N.A.D. 83)				
THRESHOLD 01 LAT.	59°07'22.9" N			
LONG.	156°51'49.4" W			
THRESHOLD 19 LAT.	59°07'51.9" N			
LONG.	156°51'21.8" W			
THRESHOLD 07 LAT.				59°07'46.6" N
LONG.				156°51'45.4" W
THRESHOLD 25 LAT.				59°07'46.3" N
LONG.				156°51'03.3" W

BASIC DATA TABLE

AIRPORT DATA

ITEM	EXISTING	FUTURE
AIRPORT ELEVATION (M.S.L.)	12.0 [39.37']	12.0 [39.37']
AIRPORT REFERENCE POINT (A.R.P.) LAT.	59°07'41.1" N	
LONG.	156°51'31.1" W	
TAXIWAY LIGHTING	M.I.	M.I.
RAMP LIGHTING	FLOOD	FLOOD
MEAN MAX. TEMPERATURE, HOTTEST MONTH (JULY)	19°C (66°F)	n/a
MAGNETIC DECLINATION, YEAR (12 MINUTES PER YEAR WEST)	17°27'E, 2004	n/a
AIRPORT CATAGORY	B-I	B-I
AIRPORT AND TERMINAL NAVIGATION AIDS	NONE	NONE

LEGEND

ITEM	EXISTING	FUTURE
PROPERTY LINE		
BUILDING RESTRICTION LINE	BRL	BRL
AVICATION & HAZARD EASEMENT		
AIRPORT REFERENCE POINT (A.R.P.)		
WIND CONE AND SEGMENTED CIRCLE		
CONTOURS	100	
ROADWAYS		
BUILDINGS		
ROTATING BEACON		
SHORELINE		
ANTENNA		
CHANNEL CHANGE		
THRESHOLD LIGHTS		
FENCING	X	X
TREES		

FILE: w:\projects\levelock\alp\2003\alpdata
DATE: 05/06/04 1=1 dovcb

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
By: _____
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600
DATE: 7/1/04
FAA AIRSPACE REVIEW NUMBER: 99-AAL-088-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
APPROVED: _____ DESIGN SECTION CHIEF
STEPHEN M. RYAN, P.E.
APPROVED: _____ PROJECT MANAGER
GARY E. LINCOLN, P.E.

DATE 5-13-04
DESIGN
DRAWN
CHECKED

LEVELOCK AIRPORT

AIRPORT LAYOUT PLAN

VICINITY MAP AND DATA TABLES

SHEET 2 OF 7

TRAVERSE WAYS TABLE

NUMBER	TRAVERSE WAY	RUNWAY STATION	RUNWAY OFFSET	OBJECT ELEV.	SURFACE ELEV.	PENETRATION	ROAD STATION
A	ROAD	0+791.44	107.48 RT.	12.6	18.36	0	5+787.22
B	ROAD	0+834.9	0.0 LT.	16.2	17.09	0	5+903.16
C	ROAD	0+894.01	92.1 LT.	16.6	16.6	0	6+015.15
D	TRAIL	2+080.15	88.23 LT.	11.1	14.59	0	8+646.22
E	TRAIL	2+172.24	11.02 LT.	10.5	17.30	0	8+768.87
F	ROAD	3+275	52.5 RT.	16.0	18.25	0	0
G	ROAD	3+275	0.0 RT.	16.0	18.25	0	0
H	ROAD	3+275	52.5 LT.	16.0	18.25	0	0

OBJECT ELEVATION = ROAD CENTERLINE ELEVATION + 4.6 METERS
OBJECT ELEVATION = TRAIL CENTERLINE ELEVATION + 3.0 METERS

NOTES

1. NO THRESHOLD SITING SURFACE OBJECT PENETRATIONS
2. NO OFZ OBJECT PENETRATIONS.

FUTURE PARALLEL TAXIWAY WITH 24m WIDE SAFETY AREA AND 27m WIDE OFA
FUTURE AWOS SITE
AVIATION SUPPORT AREA 33m x 35m, 2 EACH
48m x 35m SRE PAD WITH 7m x 14m SRE BUILDING, PEAK ELEV. 20.7, ROTATING BEACON ELEV. 22.2
FUTURE 7.3m x 15m SRE BUILDING
LIGHTED WIND CONE & SEGMENTED CIRCLE STA. 1+325, 140m LT.
12m x 57m TAXIWAY WITH 24m WIDE SAFETY AREA & 27m WIDE OFA
34:1 APPROACH SURFACE
75x135x300 RPZ
SOLID WASTE LANDFILL LOCATED 1622m FROM END OF RUNWAY 01
POWERLINE
PAPI
MAG. DEC. 17°27' E MAY 2004
FUTURE 20:1 APPROACH SURFACE
FUTURE 75x135x300 RPZ
FUTURE 5x730 ACCESS TRAIL
STA. 3+345 BEGIN FUTURE RUNWAY SAFETY AREA
STA. 3+420 BEGIN FUTURE RUNWAY
STA. 2+000 END RUNWAY
STA. 2+072 END RUNWAY SAFETY AREA
34:1 APPROACH SURFACE
75x135x300 RPZ
N 25°00'00" E
S 65°00'00" E
STA. 1+379.23= R/W STA. 7+000 T/W STA. 7+000
STA. 1+632.34 15.35m RT. AIRPORT REFERENCE POINT
FUTURE RUNWAY VISIBILITY ZONE
35x1144 RUNWAY SAFETY AREA
18x1000 RUNWAY
120x1144 RUNWAY OBJECT FREE AREA
STA. 0+928 BEGIN RUNWAY SAFETY AREA
STA. 1+000 BEGIN RUNWAY
FUTURE 36x814 RUNWAY SAFETY AREA
FUTURE 18x670 RUNWAY
FUTURE 75x814 RUNWAY OBJECT FREE AREA
FUTURE 75x135x300 RPZ
STA. 44+090 END FUTURE RUNWAY
STA. 44+162 END FUTURE RUNWAY SAFETY AREA
ACCESS ROAD R.O.W.
DITCH
7.5x1550 ACCESS ROAD
Airport St.
Second St.
Spruce St.
100m 50m 0 100m 200m
FUTURE 20:1 APPROACH SURFACE

FILE: w:\projects\levelock\alp\2003\plan
DATE: 05/06/04

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
By: _____
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600
DATE: 7/1/04
FAA AIRSPACE REVIEW NUMBER: 99-AAL-088-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
APPROVED: _____ DESIGN SECTION CHIEF
STEPHEN M. RYAN, P.E.
APPROVED: _____ PROJECT MANAGER
GARY E. LINCOLN, P.E.

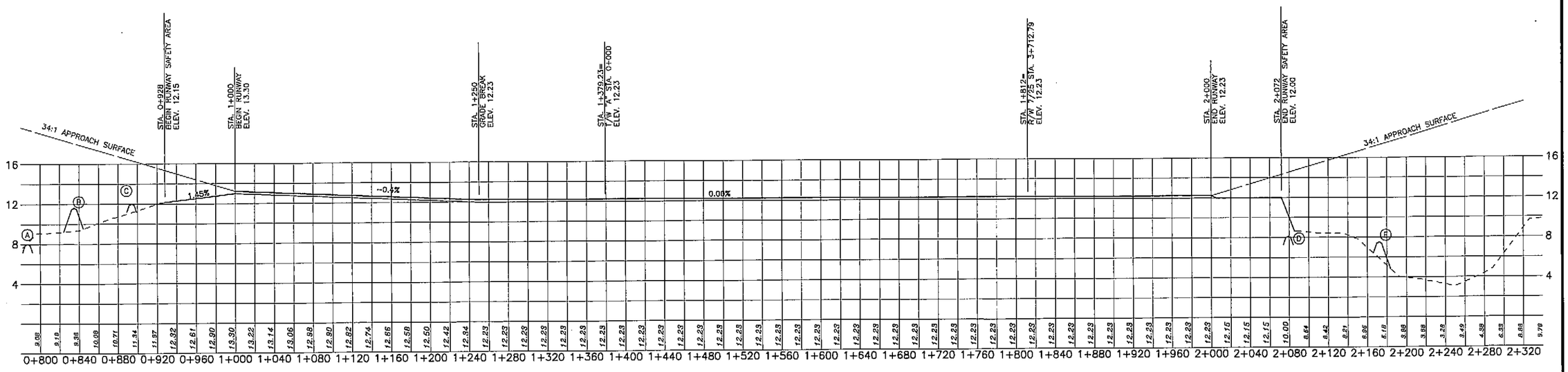
DATE 5-13-04
DESIGN
DRAWN
CHECKED

LEVELOCK AIRPORT

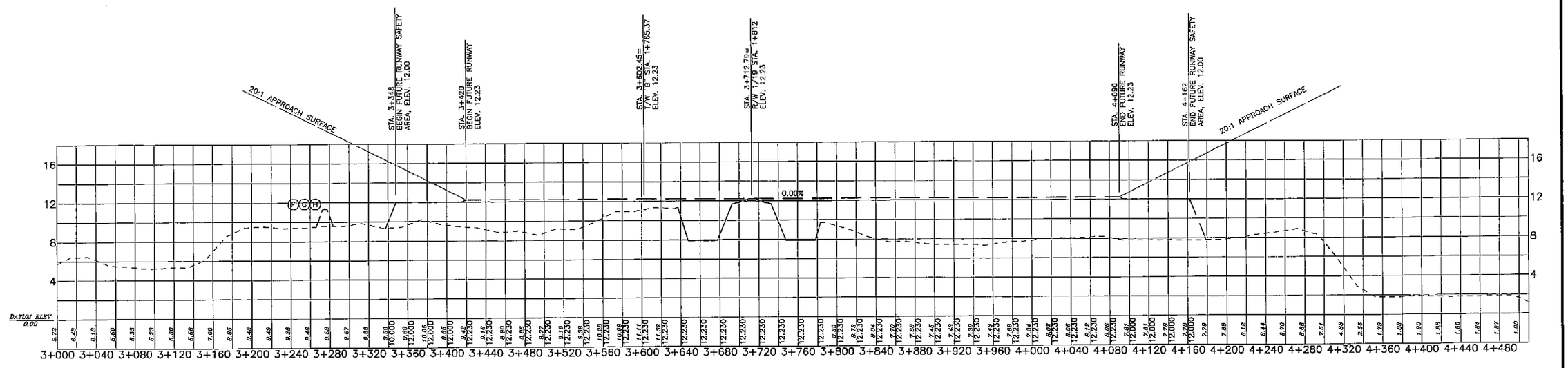
AIRPORT LAYOUT PLAN

PLAN VIEW

SHEET 3 OF 7



RUNWAY 01/19 PROFILE



FUTURE RUNWAY 07/25 PROFILE

LEGEND

Ⓐ THROUGH Ⓗ ROAD AND TRAIL CROSSINGS. SEE PLAN VIEW, SHEET 3

FILE: y:\data\levelock\alp\profiles
DATE: 04/28/04 1=1 davob

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
By: _____
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600
DATE: 7/1/04
FAA AIRSPACE REVIEW NUMBER: 99-AAL-088-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION
APPROVED: _____ DESIGN SECTION CHIEF
STEPHEN M. RYAN, P.E.
APPROVED: _____ PROJECT MANAGER
GARY E. LINCOLN, P.E.

DATE 5-13-04
DESIGN
DRAWN
CHECKED

LEVELOCK AIRPORT

AIRPORT LAYOUT PLAN

RUNWAY PROFILES

SHEET 4 OF 7

HORIZONTAL SURFACE ELEV. 190.12 [57.95m]

20:1 APPROACH

20:1 CONICAL SURFACE 4000' [1219.2m]

5000' [1524.0m] R (TYP.)

SRE BUILDING

LANDFILL

34:1 APPROACH

34:1 APPROACH

7:1 TRANSITION

20:1 APPROACH

Levelock Creek

KVICHAK RIVER

Union Creek

190.12 [57.95m]

200' [60.0m]

300' [91.4m]

390.12 [118.91m]

MAG. DEC. 17°27' E MAY 2004

1000' 500' 0 500' 1000' 1500' 2000'
SCALE IN FEET

200m 0 200m 400m
SCALE IN METERS

LEGEND

× Feet [Meters] SPOT ELEVATIONS

NOTES

1. AIRPORT AND RUNWAY ELEVATIONS ARE 40' (12m).

OBSTRUCTION DATA TABLE

NUMBER	PENETRATION DISTANCE [FEET (METERS)]	DESCRIPTION	DISPOSITION
NONE	NONE	NONE	NONE

FAA AIRSPACE REVIEW NUMBER:
99-AAL-088-NRA

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL

By: _____
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600

DATE: 7/11/04

BY	DATE	REVISIONS

DATE 5-13-04
DESIGN
DRAWN
CHECKED

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

DESIGN SECTION CHIEF

APPROVED: STEPHEN M. RYAN
PROJECT MANAGER

APPROVED: GARY E. LINCOLN, P.E.

LEVELOCK AIRPORT

AIRPORT LAYOUT PLAN

F.A.R. PART 77

SHEET 5 OF 7

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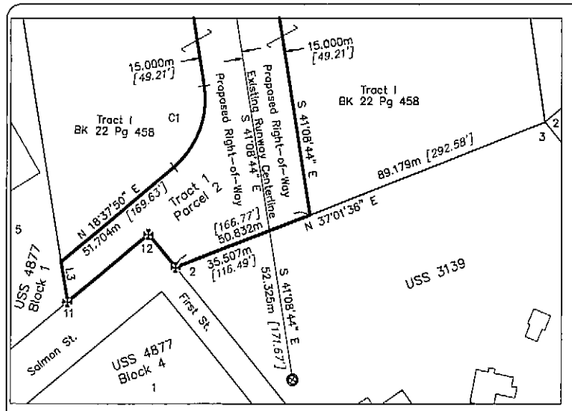
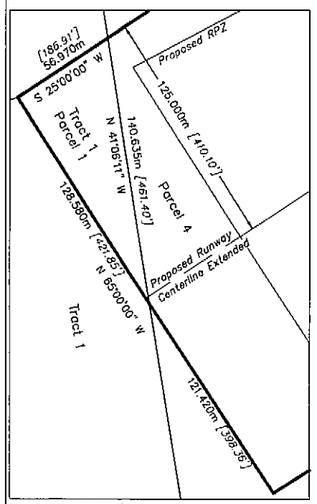
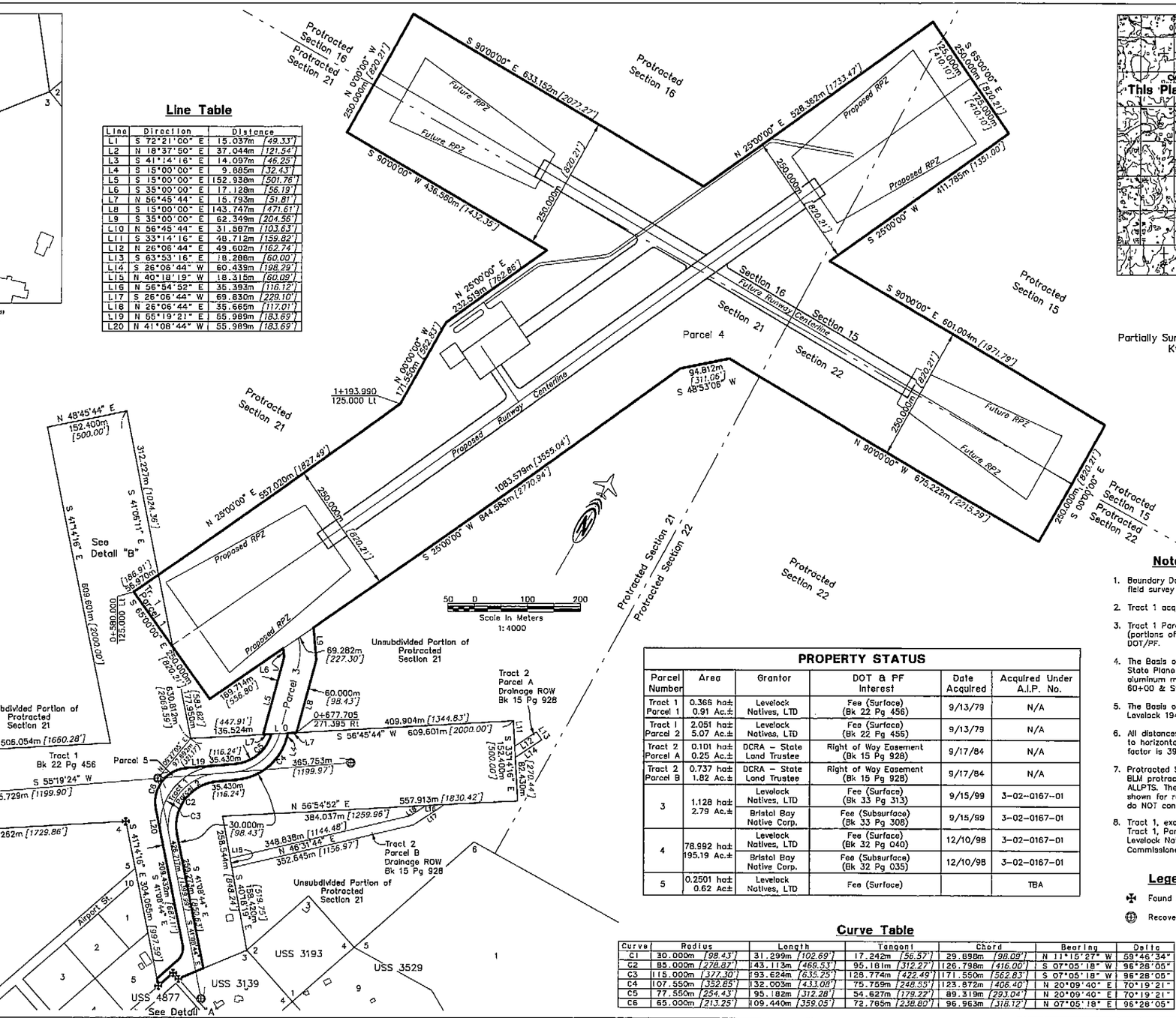
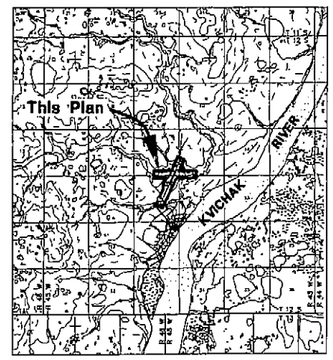




Line Table

Line	Direction	Distance
L1	S 72°21'00" E	15.037m [49.33']
L2	N 18°37'50" E	37.044m [121.54']
L3	S 41°14'16" E	14.097m [46.25']
L4	S 15°00'00" E	9.885m [32.43']
L5	S 15°00'00" E	152.938m [501.76']
L6	S 35°00'00" E	17.128m [56.19']
L7	N 56°45'44" E	15.793m [51.81']
L8	S 15°00'00" E	143.747m [471.61']
L9	S 35°00'00" E	62.349m [204.56']
L10	N 56°45'44" E	31.587m [103.63']
L11	S 33°14'16" E	48.712m [159.82']
L12	N 26°06'44" E	49.602m [162.74']
L13	S 63°53'16" E	18.288m [60.00']
L14	S 26°06'44" W	60.439m [198.29']
L15	N 40°18'19" W	18.315m [60.09']
L16	N 56°54'52" E	35.393m [116.12']
L17	S 26°06'44" W	69.830m [229.10']
L18	N 26°06'44" E	35.685m [117.01']
L19	N 65°19'21" E	55.989m [183.69']
L20	N 41°08'44" W	55.989m [183.69']





Vicinity Map

Scale 1:100,000
USGS Dillingham A-3
Partially Surveyed T12S R45W Seward Meridian
Kvichak Recording District

Notes

1. Boundary Data Based upon 1995 DOT/PF field survey and record documents.
2. Tract 1 acquired by DOT/PF 9/13/79.
3. Tract 1 Parcel 1 and Tract 1 Parcel 2 (portions of Tract 1) to be retained by DOT/PF.
4. The Basis of Bearings is the computed NAD83 State Plane Grid bearing from recovered aluminum monuments on Runway 3/21 at Sta. 60+00 & Sta. 72+00 – S 55°19'24" W.
5. The Basis of Coordinates is USC&GS Station Levelock 1946.
6. All distances are ground distances reduced to horizontal in meters. Meter to Foot conversion factor is 3937/1200.
7. Protracted Section Lines are based upon BLM protraction values interpreted by ALLPTS. The protracted section lines are shown for reference purposes only and do NOT control property boundary locations.
8. Tract 1, excluding Tract 1, Parcel 1 and Tract 1, Parcel 2, was reconveyed back to Levelock Natives, LTD on 11/26/2001, Commissioner's QCD, 2001-000488-0.

PROPERTY STATUS

Parcel Number	Area	Grantor	DOT & PF Interest	Date Acquired	Acquired Under A.I.P. No.
Tract 1 Parcel 1	0.365 ha± 0.91 Ac.±	Levelock Natives, LTD	Fee (Surface) (Bk 22 Pg 456)	9/13/79	N/A
Tract 1 Parcel 2	2.051 ha± 5.07 Ac.±	Levelock Natives, LTD	Fee (Surface) (Bk 22 Pg 455)	9/13/79	N/A
Tract 2 Parcel A	0.101 ha± 0.25 Ac.±	DCRA – State Land Trustee	Right of Way Easement (Bk 15 Pg 928)	9/17/84	N/A
Tract 2 Parcel B	0.737 ha± 1.82 Ac.±	DCRA – State Land Trustee	Right of Way Easement (Bk 15 Pg 928)	9/17/84	N/A
3	1.128 ha± 2.79 Ac.±	Levelock Natives, LTD	Fee (Surface) (Bk 33 Pg 313)	9/15/99	3-02-0167-01
		Bristol Bay Native Corp.	Fee (Subsurface) (Bk 33 Pg 308)	9/15/99	3-02-0167-01
4	78.992 ha± 195.19 Ac.±	Levelock Natives, LTD	Fee (Surface) (Bk 32 Pg 040)	12/10/98	3-02-0167-01
		Bristol Bay Native Corp.	Fee (Subsurface) (Bk 32 Pg 035)	12/10/98	3-02-0167-01
5	0.2501 ha± 0.62 Ac.±	Levelock Natives, LTD	Fee (Surface)		TBA

Curve Table

Curve	Radius	Length	Tangent	Chord	Bearing	Delta
C1	30.000m [98.43']	31.299m [102.69']	17.242m [56.57']	29.898m [98.08']	N 11°15'27" W	59°46'34"
C2	85.000m [278.87']	143.113m [469.53']	95.181m [312.27']	126.798m [416.00']	S 07°05'18" W	96°28'05"
C3	115.000m [377.30']	193.624m [635.25']	128.774m [422.49']	171.550m [562.83']	S 07°05'18" W	96°28'05"
C4	107.550m [352.85']	132.003m [433.08']	75.759m [248.55']	123.872m [406.40']	N 20°09'40" E	70°19'21"
C5	77.550m [254.43']	95.182m [312.28']	54.627m [179.22']	89.319m [293.04']	N 20°09'40" E	70°19'21"
C6	65.000m [213.25']	109.440m [359.05']	72.765m [238.80']	96.963m [318.12']	N 07°05'18" E	96°28'05"

Legend

- Found GLO or BLM Brass Cap Mon.
- Recovered Centerline Monument

Date revised: 5/11/04 C. Earl
Date revised: 3/15/00 L. Hooyer
FILE: g:\data\levelock\row\proppian\prop_99
DATE: 07/13/00 1=1 daveb

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL SUBJECT TO ALP APPROVAL LETTER DATED 7/1/04
BY: _____ DATE: 7/1/04
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600

FAA AIRSPACE REVIEW NUMBER: 99-AAL-08B-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: _____ STEPHEN M. RYAN, P.E. DESIGN SECTION CHIEF
APPROVED: _____ GARY E. LINCOLN, P.E. PROJECT MANAGER

DATE 5-19-04
DESIGN glh
DRAWN glh, gz
CHECKED _____

LEVELOCK AIRPORT

AIRPORT LAYOUT PLAN

PROPERTY PLAN

SHEET 6 OF 7

LEVELOCK AIRPORT
AIRPORT LAYOUT PLAN NARRATIVE REPORT

A. PURPOSE

THIS AIRPORT LAYOUT PLAN NARRATIVE REPORT IS INCLUDED WITH THE AIRPORT LAYOUT PLAN ACCORDING TO FEDERAL AVIATION ADMINISTRATION (FAA) AIRPORT DESIGN ADVISORY CIRCULAR 150/5300-13, CHANGE 5, APPENDIX 7.

TO ENSURE THAT AIRPORT IMPROVEMENTS SERVE THE COMMUNITY THROUGHOUT THE NEXT 20 YEARS, IT IS IMPORTANT THAT AIRPORT DEVELOPMENT COMPONENTS BE ADEQUATELY SIZED AND MEET ESTABLISHED SAFETY STANDARDS. THE STANDARDS ARE ESTABLISHED BY THE ALASKA AVIATION SYSTEM PLAN (AASP) AND THE FAA ADVISORY CIRCULAR 150/5300-13, CHANGE 5.

B. INTRODUCTION

LEVELOCK IS LOCATED 10 MILES INLAND FROM KVICHAK BAY, 58 MILES EAST OF DILLINGHAM AND 278 AIR MILES SOUTHWEST OF ANCHORAGE. AIRCRAFT PROVIDE THE ONLY YEAR-ROUND PUBLIC TRANSPORTATION SERVICE TO LEVELOCK. BARGE SERVICE FROM SEATTLE IS SEASONABLY AVAILABLE. MODES OF LOCAL TRANSPORTATION INCLUDE ATVS, SNOW MACHINES AND TRUCKS. TRAILS TO SURROUNDING VILLAGES ARE USED IN THE WINTER.

LEVELOCK HAD A PERMANENT POPULATION OF 128 PERSONS IN 1998. POPULATION RECORDS INDICATE AN AVERAGE ANNUAL GROWTH RATE OF 2.5% TO 2.8% BETWEEN 1980 AND 1998. THE ALASKA AVIATION SYSTEM PLAN (AASP) DESIGNATES THIS AIRPORT AS A "COMMUNITY" CLASS FACILITY. AIRPORTS IN THIS CLASS PROVIDE PRIMARY ACCESS TO SMALL RURAL COMMUNITIES WITH AT LEAST 25 PERMANENT RESIDENTS AND WITHOUT OTHER RELIABLE ALTERNATIVE YEAR ROUND ACCESS.

C. CURRENT USAGE AND FORECASTS

THE AIRPORT MASTER RECORD (FAA FORM 5010-1, LAST REVISED 07/28/99) REPORTS THE FOLLOWING DATA FOR ANNUAL AIRCRAFT OPERATIONS: 500 AIR TAXI, 800 GENERAL AVIATION ITINERANT AND 150 GENERAL AVIATION LOCAL. THESE TRAFFIC SEGMENTS TOTAL 1450 OPERATIONS FOR THE PRECEDING 12 MONTHS. VOLUNTARY REPORTS FROM AIR CARRIERS LIST ENPLANEMENTS AS FOLLOWS:

TABLE 1: REPORTED ANNUAL ENPLANEMENTS

YEAR	ENPLANEMENTS
1994	1067
1995	1225
1996	1365
1997	1427
1998	1450

SUCH VOLUNTARY REPORTS USUALLY INDICATE FEWER FLIGHTS THAN ARE ACTUALLY FLOWN. IN RESPONDING TO A RECENT SURVEY, AIR TAXI OPERATORS STATED THEY FLY APPROXIMATELY SEVEN SCHEDULED FLIGHTS PER WEEK. SUMMER SEASON CHARTERS RANGE FROM AS LOW AS 21 FLIGHTS PER WEEK TO AS HIGH AS 95 FLIGHTS PER WEEK, DEPENDING ON DEMAND. DEMAND INCREASES AS THE LOCAL FISHING COMMUNITY HIRES PERSONNEL FOR THE COMMERCIAL FISHING SEASON. THERE IS ONE AIRCRAFT CURRENTLY BASED AT LEVELOCK. BASE-YEAR (1997) OPERATIONS ARE ESTIMATED FROM THESE DATA. PROJECTIONS OF FUTURE AIRCRAFT OPERATIONS (TABLE 2) ARE BASED ON THE ASSUMED 2.5% PER YEAR POPULATION GROWTH RATE.

TABLE 2: FORECAST OF FUTURE OPERATIONS

ITEM	TOTAL ANNUAL OPERATIONS	ANNUAL LOCAL OPERATIONS	ANNUAL ITINERANT OPERATIONS	ANNUAL ENPLANEMENTS	ANNUAL INSTRUMENT APPROACHES	ANNUAL OPERATIONS (CURRENT CRITICAL AIRCRAFT)*	ANNUAL OPERATIONS (FUTURE CRITICAL AIRCRAFT)**
1997	1450	150	800	1427	0	1160	290
2002	1640	169	905	1614	0	1312	328
2007	1856	192	1024	1827	0	1485	371
2017	2375	245	1310	2339	0	1900	475

* ASSUME: CURRENT CRITICAL AIRCRAFT=80% OF TOTAL OPERATIONS
** ASSUME: FUTURE CRITICAL AIRCRAFT = 1% OF TOTAL OPERATIONS, INCREASING AT ABOUT 10% PER YEAR

D. AIRPORT DEVELOPMENT

THE DEVELOPMENT OF THE LEVELOCK AIRPORT WILL BE ACCOMPLISHED IN STAGED INCREMENTS OF NEAR-TERM (0-5 YEARS), MID-TERM (6-10 YEARS) AND LONG-TERM (11-20 YEARS)

NEAR-TERM (0-5 YEARS) DEVELOPMENT

NEAR TERM DEVELOPMENT WILL CONSTRUCT A 7.3 METER X 15.2 METER (24 FOOT BY 50 FOOT) HEATED SNOW REMOVAL EQUIPMENT BUILDING AT THE EXISTING AIRPORT.

MID-TERM (6-10 YEARS) DEVELOPMENT

NONE PLANNED

LONG-TERM (11-20 YEARS) DEVELOPMENT

LONG-TERM DEVELOPMENT WILL CONSTRUCT AN ADG B-I CROSSWIND RUNWAY AND A TAXIWAY PARALLEL TO THE MAIN RUNWAY TO SERVE THE CROSSWIND RUNWAY.

LONG-TERM WORK

1. CONSTRUCT A CROSSWIND RUNWAY WITH FINISHED TOP SURFACE/ SAFETY AREA OF 36M X 814M. SURFACE EMBANKMENT WITH 18M X 670M GRAVEL PAD FOR RUNWAY SURFACE.
2. CONSTRUCT A TAXIWAY EMBANKMENT PARALLEL TO THE MAIN RUNWAY BETWEEN THE APRON AND THE CROSS WIND RUNWAY WITH A 24M X 287M FINISHED SURFACE/ SAFETY AREA TOPPED WITH AN 18M X 670M GRAVEL SURFACE.
3. CONSTRUCT A 5M X 730M ACCESS PATHWAY AROUND THE WEST END OF THE CROSSWIND RUNWAY TO REPLACE THE ACCESS PATHWAY OBSTRUCTED BY THE CROSSWIND RUNWAY CONSTRUCTION

D. DESIGN RATIONALE

1. AIRPORT REFERENCE CODE (ARC)

THE LEVELOCK AIRPORT WAS DESIGNED TO MEET FAA AC 150/5300-13, CHANGE 5, APPROACH CATEGORY B STANDARDS FOR LANDING SPEEDS GREATER THAN 91 KNOTS BUT LESS THAN 121 KNOTS. THE AIRPORT ALSO MEETS AIRPORT DESIGN SPECIFICATIONS FOR AIRCRAFT DESIGN GROUP I (ADG I); THAT IS, AIRCRAFT WITH WINGSPANS LESS THAN 15 M, ACCORDING TO FAA ADVISORY CIRCULAR 150/5300-13, CHANGE 5, AIRPORT DESIGN.

2. WIND COVERAGE

WIND DATA COLLECTED FROM AUGUST 5 1995 TO APRIL 15 1997 YIELDS 95.4% COVERAGE ON RUNWAY 1-19 FOR ADG B-I AIRCRAFT. THIS EXCEEDS THE MINIMUM RECOMMENDED COVERAGE OF 95% FOR AIRCRAFT EXPECTED TO USE THE RUNWAY ON A REGULAR BASIS.

ANALYSIS OF THE WIND DATA SHOWS A SIGNIFICANT PERCENTAGE OF HIGHER WINDS FROM THE NORTHEAST. THIS AGREES WITH THE PREDOMINANT DIRECTION FOR STORM ACTIVITY IN THE WINTER MONTHS. WHILE THE PERCENTAGE DOES NOT WARRANT CONSTRUCTION OF A CROSSWIND RUNWAY AT THIS TIME, ONE IS PLANNED FOR THE FUTURE SHOULD OPERATIONAL SAFETY PROVE THAT THE RUNWAY IS NEEDED. THE FUTURE CROSS WIND RUNWAY YIELDS 94.4% COVERAGE FOR ADG B1 AIRCRAFT. COMBINED COVERAGE FOR BOTH RUNWAYS YIELDS 99.1% COVERAGE.

3. RUNWAY

THE EXISTING AIRPORT IS OWNED AND OPERATED BY THE STATE OF ALASKA DEPARTMENT OF TRANSPORTATION & PUBLIC FACILITIES. IT HAS ONE RUNWAY (01-19) WHICH CURRENTLY MEETS ADG STANDARDS FOR A B-I VISUAL APPROACH RUNWAY AIRPORT (TABLE 3).

TABLE 3: EXISTING AIRPORT DIMENSIONS AND DESIGN STANDARDS

AIRPORT DESIGN STANDARD	EXISTING B-I (m)	STANDARD B-I (m)
RUNWAY LENGTH	1000	n/a
RUNWAY WIDTH	18	18
RUNWAY SAFETY AREA WIDTH	36	36
RUNWAY SAFETY AREA LENGTH BEYOND RUNWAY END	72	72
RUNWAY OFA WIDTH	120	120
RPZ LENGTH	300	300
RPZ INNER WIDTH	75	75
RPZ OUTER WIDTH	135	135
APPROACH SLOPE ANGLE	20:01	20:01

F. PROPERTY STATUS

THE ADOT&PF HAS FEE SIMPLE OWNERSHIP OF ALL LAND WITHIN THE AIRPORT BOUNDARIES.

G. COMMUNITY INVOLVEMENT

NO ENVIRONMENTAL PERMITS ARE REQUIRED FOR THIS PROJECT. HOWEVER THE DEPARTMENT OF TRANSPORTATION WILL PROVIDE OPPORTUNITIES FOR COMMUNITY INPUT AND WILL KEEP THE VILLAGE OF LEVELOCK INFORMED OF THE DEVELOPING PROJECT.

H. NON-STANDARD CONDITIONS

THE STANDARD SEPARATION DISTANCE TO RUNWAY CENTERLINE FROM AIRCRAFT PARKING FOR A B-I RUNWAY IS 60M. 75M WILL SEPARATE RUNWAY 01-19 FROM THE PARALLEL TAXIWAY. (TABLE 4). THIS LAYOUT IS MORE CONSERVATIVE AND ALLOWS FOR RAISING THE AIRCRAFT RATING OF THE AIRPORT IN THE FUTURE WHILE MAINTAINING FULL USE OF THE APRON CONSTRUCTED.

THE STANDARD SEPARATION FROM A PARALLEL TAXIWAY TO RUNWAY CENTERLINE IS 67.5M. RUNWAY 01-19 CENTERLINE TO PARALLEL TAXIWAY CENTERLINE WILL BE 100M (TABLE 4). THIS LAYOUT IS MOVE CONSERVATIVE AND ALLOWS THE TAXIWAY TO MATCH THE APRON. AT THE STANDARD SEPARATION, ONLY A PORTION OF THE TAXIWAY CROSS SECTION WOULD MATCH THE APRON SECTION.

THE STANDARD B-I TAXIWAY SAFETY AREA WIDTH IS 15M. LEVELOCK'S TAXIWAY SAFETY AREAS WILL BE CONSTRUCTED TO 24M WIDE. THIS DEVIATION IS CONSERVATIVE AND IS INCORPORATED, AS ICY TAXIWAYS ARE FREQUENT. WIDER SAFETY AREA WILL HELP REDUCE THE POSSIBILITY OF AIRCRAFT LEAVING THE TAXIWAYS UNDER ICY WINDY CONDITIONS.

THERE ARE NO KNOWN ENCROACHMENTS TO THE PART 77 SURFACE ON THE EXISTING AIRPORT.

TABLE 4: TAXIWAY DIMENSIONS VS. DESIGN STANDARDS

AIRPORT DESIGN STANDARD	EXISTING B-I (m)	STANDARD B-I (m)	ULTIMATE B-I (m)
TAXIWAY WIDTH	12	7.5	
TAXIWAY SAFETY AREA WIDTH	24	15	
TAXIWAY OFA WIDTH	27	27	
AIRCRAFT PARKING AREA TO R/W CENTERLINE	75	60	
R/W TO PARALLEL T/W SEPARATION		67.5	100

I. LEVELOCK LANDFILL

THERE IS A SOLID WASTE LANDFILL LOCATED 5320 FEET FROM THE SOUTH END OF THE EXISTING RUNWAY. THIS LANDFILL HAS NOT CAUSED ANY AVIAN ACTIVITY DISRUPTIVE TO AIRPORT OPERATION OR SAFETY IN THE PAST AND IS NOT EXPECTED TO CAUSE ANY PROBLEM IN THE FUTURE. THE EXISTING DUMPSITE IS LOCATED AT THE FARTHEST ACCESSIBLE POINT ON THE COMMUNITY'S BOARDWALK SYSTEM.

FILE: v:\projects\levelock\ALP\2003\narrative.dwg
DATE: 05/12/04

AIRPORT LAYOUT PLAN CONDITIONAL APPROVAL
By: [signature]
FAA, AIRPORTS DIVISION
ALASKAN REGION, AAL-600
DATE: 7/1/04

FAA AIRSPACE REVIEW NUMBER: 99-AAL-088-NRA

BY	DATE	REVISIONS

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
CENTRAL REGION

APPROVED: [signature]
STEPHEN M. RYAN, P.E. — DESIGN SECTION CHIEF

APPROVED: [signature]
GARY E. LINCOLN, P.E. — PROJECT MANAGER

DATE 5-13-04
DESIGN [signature]
DRAWN [signature]
CHECKED

LEVELOCK AIRPORT
AIRPORT LAYOUT PLAN
NARRATIVE REPORT

SHEET 7 OF 7